

SYSTEM DESCRIPTION:

A LOOSE MIXTURE OF DRY POWDERS AT AMBIENT TEMP IS FED INTO THE MIXING SHAFT ASSEMBLY. THE DRY POWDERS ARE THEN MIXED TOGETHER WITH NO ADDITIONAL HEAT ADDED. SHEARING ACTION OF MIXING SHAFT PRODUCES HEAT IN THE MATERIAL WHILE IT IS BEING MIXED. COOLING MUST BE PROVIDED TO MAINTAIN MAXIMUM FINAL MIXED MATERIAL TEMP OF 180F. APPROXIMATE HEAT TRANSFER TO COOLING WATER IS 31,500 BTU/HOUR. PROCESS IS CONTINUOUS FOR ABOUT TWO HOURS, THEN SHUT DOWN FOR 20 MINUTES TO LOAD ANOTHER CONTAINER OF DRY POWDERS ON TOP OF MIXING SHAFT ASSEMBLY. PROCESS RATE IS 500 LBS PER HOUR.

